## **Wellhead Protection Program:**

THE NEAREST PUBLIC WATER SYSTEM (PWS) WELL IS LOCATED 3,070 FEET SOUTHEAST AND CROSS GRADIENT OF THE PERMIT DISCHARGE POINT NEAR THE INTERSECTION OF SAHARA AVENUE AND BOULDER HIGHWAY. THE GROUNDWATER FLOW DIRECTION IS GENERALLY TO THE EAST TOWARD LAS VEGAS WASH. THE DISCHARGE FACILITY IS JUST OUTSIDE THE 3000-FOOT RADIUS DRINKING WATER PROTECTION AREA (DWPA) WHICH REPRESENTS THE 10-YEAR CAPTURE ZONE. THE DISCHARGE FACILITY IS NOT LOCATED WITHIN ANY WELL HEAD PROTECTION AREA (WHPA). THE NEXT CLOSEST PWS WELL RICH IS LOCATED 6,540 FEET NORTHWEST AND CROSS GRADIENT OF THE DISCHARGE FACILITY. THE TWO PWS WELLS ARE Johnson COMPLETED WITHIN A CONFINED AQUIFER WITH 80- AND 100-FOOT SANITARY SEALS. THE PERMITTED DISCHARGE WILL PROBABLY NOT AFFECT THE PWS WELLS BECAUSE OF PROPER WELL CONSTRUCTION WITHIN A CONFINED AQUIFER, CONVEYANCE OF THE DISCHARGE WATER WITHIN AN EXISTING FLOOD CONTROL CHANNEL AND THE HYDRAULIC GRADIENT BETWEEN THE PERMITTED FACILITY AND THE WELLS.

The nearest public water system (PWS) well is located 3,070 feet southeast and cross gradient of the permit discharge point near the intersection of Sahara Avenue and Boulder Highway. The groundwater flow direction is generally to the east toward Las Vegas Wash. The project site is just outside the 3000-foot radius drinking water protection area (DWPA) which represents 10-year capture zone. The discharge facility is not located within any well head protection area (WHPA). The next closest PWS well is located 6,540 feet northwest and cross gradient of the discharge facility. The two PWS wells are completed within a confined aquifer with adequate sanitary seals. The permitted discharge will probably not affect the PWS because of proper well construction within a confined aquifer, conveyance of the discharge water within an existing flood control channel and the hydraulic gradient between the permitted facility and the wells.